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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,767	07/05/2001	Thomas E. Mallouk	105557	2345

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EXAMINER

BYRD, DEVON R

ART UNIT

PAPER NUMBER

1639

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/899,767

Applicant(s)

MALLOUK ET AL.

Examiner

Devon R Byrd

Art Unit

1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Status of the Claims**

Claims 1-32 are pending in the present application and are subject to restriction and election of species requirements.

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-16, drawn to a combinatorial screening apparatus, classified in class 435, subclass DIG 43, 45.
- II. Claims 17-24, drawn to a method for screening an array of solids for electrocatalytic activity, classified in class 435, subclass DIG 2, 30.
- III. Claims 25-30, drawn to an apparatus for bulk catalyst testing, classified in class 502, subclass 439.
- IV. Claims 31 and 32, drawn to a method for screening a catalyst for electrocatalytic activity, classified in class 502, subclass 514.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, both conditions are met because (1) the claimed process could be practiced by hand, and (2) the apparatus as claimed can be used to screen for catalysts with properties other than electrocatalytic.

Art Unit: 1639

Although there are no provisions under the section for "Relationship of Inventions" in MPEP § 806.05 for inventive groups that are directed to different apparatus, restriction is deemed proper because these apparatus appear to constitute patentably distinct inventions for the following reasons: In the instant case the different inventions as claimed are not disclosed as capable of use together. They have different modes of operation in that the apparatus of Group I has only a single fluid inlet and does not require the second fluid inlet of Group III. They have different functions and effects, as Group I is directed to combinatorial screening, whereas Group III is directed to bulk testing.

Restriction between Groups I and IV is deemed proper because these groups appear to constitute patentably distinct inventions for the following reasons: In the instant case the different inventions as claimed are not disclosed as capable of use together and have different functions and effects, as Group I is an apparatus directed to combinatorial screening, whereas Group IV is a method directed to screening a catalyst for electrocatalytic activity. Moreover, the apparatus of Group I may be used to screen for properties other than electrocatalytic.

Restriction between Groups II and III is deemed proper because these groups appear to constitute patentably distinct inventions for the following reasons: In the instant case the different inventions as claimed are not disclosed as capable of use together and have different functions and effects because the apparatus of Group III does not require the array of solids of the method of Group II. The Groups have different utility such as the screening of an array of solids as claimed in Group II, and the use in testing a bulk solid as in Group III.

Although there are no provisions under the section for "Relationship of Inventions" in MPEP § 806.05 for inventive groups that are directed to different methods, restriction is deemed proper

Art Unit: 1639

because these methods appear to constitute patentably distinct inventions for the following reasons: In the instant case, the methods are not disclosed as capable of use together. Moreover, the claimed methods have different modes of operation, functions and effects, in that Group II is directed to screening an array (e.g., a plurality) of solids for the purpose of identifying an electrocatalyst among a group of candidates, whereas Group IV is directed to the determination of the electrocatalytic properties of a (singular) known catalyst.

Inventions III and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, both conditions are met because (1) the claimed process could be practiced by hand, and (2) the apparatus as claimed can be used to screen for catalysts with properties other than electrocatalytic.

**Because these inventions are distinct for the reasons given above, and**

- a. have acquired a separate status in the art as shown by their different classification;
- b. have different and separately burdensome manual and/or computer structure, name, and bibliographical searches; and,
- c. have divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

Art Unit: 1639

currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### **Election of Species (Groups I, II, and IV)**

Claims 1, 2, 17-20, 23, 31, and 32 are generic to a plurality of disclosed patentably distinct species comprising:

- a) a catalyst (conductive or otherwise) array support
- b) a detector
- c) solids
- d) a reagent fluid (i.e., hydrogen, oxygen, reformat gas, etc.)
- e) an ion concentration indicator (i.e., Phloxine, Ni<sup>3+</sup> 3-pyridin-2-yl-<4,5,6>-triazolo-<1,5-a>-pyridine, etc)
- f) a [2<sup>nd</sup>] reagent fluid

The species mentioned above have different and separately burdensome manual and/or computer structure, name, and bibliographical searches; and have divergent subject matter.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: 1639

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon R Byrd whose telephone number is 703-305-0159. The examiner can normally be reached on Mon-Fri 8a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 703-306-2317. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-2742 for regular communications and 703-308-2742 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Application/Control Number: 09/899,767

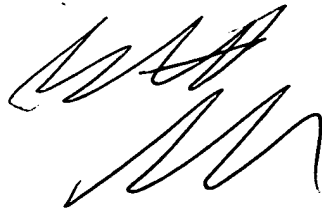
Page 7

Art Unit: 1639

**DB**

August 8, 2003

**BENNETT CELSA  
PRIMARY EXAMINER**

Handwritten signature of Bennett Celsa, consisting of two distinct, stylized cursive marks.